

ABSTRACT

38 An airgap type etalon has a higher degree of design freedom of a wavelength-temperature characteristic so that such a wavelength-temperature characteristic can be freely adjusted. The airgap type etalon includes a fixing block having one flat surface, and a transparent parallel flat plate having parallel flat surfaces formed with an antireflection coating and a reflection augmenting coating thereon, respectively. The flat surface at the antireflection coating side is joined to the flat surface of the fixing block. A parallel flat spacer has a thickness greater than that of the transparent parallel flat plate and an expansion coefficient different from that of the transparent parallel flat plate. One of the flat surfaces of the parallel flat spacer is joined to the flat surface of the fixing block. A transparent flat plate has opposite flat surfaces formed with an antireflection coating and a reflection augmenting coating thereon, respectively. The flat surface at the reflection augmenting coating side is joined to the other of the flat surfaces of the parallel flat spacer, wherein a Fabry-Perot interferometer is formed based on an airgap positioned between the flat surface of the transparent parallel flat plate and the flat surface of the transparent flat plate, which flat surfaces face each other.
